

The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policymakers, consumers, analysts, and State and local governments. It is published each Thursday by the Energy Information Administration. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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#### HIGHLIGHTS

#### Refinery Activity

Crude oil input to refineries averaged 12.3 million barrels per day for the four weeks ending July 13, 1984. Refinery capacity utilization averaged 77.3 percent during the period. During the four weeks ending July 13, 1984, motor gasoline production averaged 6.6 million barrels per day, and distillate fuel oil production averaged 2.9 million barrels a day.

#### Stocks

On July 13, 1984, stocks of crude oil (excluding the Strategic Petroleum Reserve) stood at 354.5 million barrels, which is about 3 percent above the level one year ago. Stocks of total motor gasoline, at 246.2 million barrels, which is about 1 percent below the level one year ago. Distillate fuel oil stocks stood at 119.2 million barrels, which is about 1 percent below the level one year ago. Stocks of residual fuel oil stood at 46.8 million barrels, which is about 8 percent below the level one year ago.

#### Imports

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 4.8 million barrels a day for the four weeks ending July 13, 1984, about the same as the average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.4 million barrels a day for the four-week period ending July 13, 1984.

#### Products Supplied

Total petroleum products supplied averaged 15.5 million barrels a day for the four-week period ending July 13, 1984, which is about 2 percent above the rate supplied a year ago. Motor gasoline was supplied at a rate of 7.0 million barrels a day, which is about 1 percent above the rate supplied a year ago. Distillate fuel oil was supplied at a rate of 2.6 million barrels a day, about 7 percent above the rate supplied a year ago.

#### World Crude Oil Price

The estimated weighted average international price of crude oil as of July 17, 1984, remains at \$28.65 a barrel.

#### Spot Market Product Price

For the week ending July 13, 1984, the average spot market price of 98 octane gasoline on the Rotterdam market increased, from the week ending June 29, 1984, \$1.23 to \$31.36 a barrel; the gasoil price increased 6 cents to \$30.76 a barrel, and the price of residual fuel oil increased 15 cents to \$27.18 a barrel. On the New York market, the average spot price of 89 octane regular gasoline decreased 2 cents to \$32.03 a barrel; the price of No. 2 heating oil also decreased 2 cents to \$32.28 a barrel, and the residual fuel oil price increased 25 cents to \$29.00 a barrel.

Petroleum Supply		k Averages iod Ending	Percent	Daily	lative Averages Days	Percent
(Thousand Barrels per Day)	07/13/84	07/13/83	Change	1984	1983	Change
Crude Oil Supply						
(1) Domestic Production	E8,754	8,654	1.2	E8,718	8,700	0.2
(2) Net Imports (Including SPR) <sup>2</sup>	3,567	3,559	0.2	3,244	2.819	15.1
(3) Gross Imports (Excluding SPR) (4) SPR Imports	3,447	3,477	-0.9	3,240	2,773	16. <del>9</del>
(5) Exports	292 E172	226	10.1	197	221	
(6) SPR Stocks Withdrawn (+) or Added (-)	-310	144 ~144	19.1	E193 <b>-</b> 196	175 -206	10.6
(7) Other Stocks Withdrawn (+) or Added (-)	189	251		-55	-206 28	
(8) Products Supplied and Losses	E-64	-65		E-65	-69	
(9) Unaccounted-for Crude	182	63	Arm SMC	402	155	
(10) Crude Oi? Input to Refineries	12,318	12,317	0.0	12,048	11,427	5.4
Other Supply						
(11) NGL Production	E1,616	1,524	6.1	E1,604	1,534	4.5
(12) Other Hydrocarbon Input and Alcohol Input	E43	64	-32.5	E46	54	-14.5
(13) Crude Oil Product Supplied	E64	. 64	~0.7	E64	68	-6.1
(14) Processing Gain (15) Net Product Imports <sup>3</sup>	585	489	19.8	563	483	16.7
(16) Gross Product Imports	1,265	1,258	0.5	1,491	936	59.3
(17) Product Exports	1,748 E483	1,801	-3.0	1,988	1,589	25.1
(18) Product Stocks Withdrawn (+) or Added (-)4	-366	543 -542	-11.0 	E497 -35	653 429	-23.9
(19) Total Product Supplied for Domestic Use	15,524	15,173	2.3	15,782	14,931	5.7
Products Supplied				·	•	
(20) Motor Gasoline	6,982	6,896	1.3	6,634	6 514	1.0
(21) Naphtha-type Jet Fuel	229	211	8.4	219	6,514 213	1.8 3.1
(22) Kerosene-type Jet Fuel	945	864	9.4	920	813	13.2
(23) Distillate Fuel Oil	2,590	2,415	7.2	2,973	2,657	11.9
(24) Residual Fuel Oil	1,236	1,313	<b>-5.</b> 9	1,495	1,458	2.5
(25) Other Oils Supplied <sup>5</sup>	3,543	3,474	2.0	3,540	3,277	8.1
(26) Total Products Supplied	15,524	15,173	2.3	15,782	14,931	5.7
Petroleum Stocks					Percent Cha	nge from
(Million Barrels)	07/13/84	07/06/84	07/13/83		vious Week	Year Ago
Crude Oil (Excluding SPR) <sup>6</sup>	354.5	351.7	344.6		0.0	2.0
Total Motor Gasoline	246.2	247.9	225.6		0.8 -0.7	2.9 9.1
Finished Motor Gasoline	206.5	206.9	185.5		-0.2	11.3
Blending Components	39.8	41.0	40.1		-3.1	-0.8
Naphtha-type Jet Fuel	6.2	6.2	7.0		0.0	_44 A
Kerosene-type Jet Fuel	35.6	35.9	34.0		-0.9	
Distillate Fuel Oil Residual Fuel Oil	119.2	115.5	120.3		3.2	
Unfinished_Oils	46.8	44.1	50.6		6.0	
Other Oils	103.6 E180.8	105.1 E179.5	109.7 186.1		~1.4	
Total Stocks (Firelyster CDD)						
Total Stocks (Excluding SPR) Crude Oil In SPR	1,092.9					
Total Stocks (Including SPR)	417.0 1 509 c					
THE THOUSE THOUSENED OF IT.	1,509.6					

E=Estimate based on monthly data.

are calculated using unrounded numbers.

<sup>1</sup> Includes lease condensate.
2 Net Imports = Gross Imports (line 3) + SPR Imports (1 3 Includes finished petroleum products, unfinished oils liquids for processing.

liquids for processing.

4 Includes an estimate of minor product stock change ba
5 Includes crude oil product supplied, natural gas liqu
finished petroleum products except motor gasoline, jet fue
6 Includes crude oil in transit to refineries.
7 Included are stocks of all other oils such as aviatio
(including ethane), aviation gasoline blending components,
feedstock use, special naphthas, lube oils, wax, coke, asp
For the current two weeks, stocks of these minor products
Stock Change (Refined Products)).
Note: Due to independent rounding, individual product
are calculated using unrounded numbers.

Source: o 1983 Annual Data: EIA, "Petroleum Supply A o 1984 Monthly Data: EIA, "Petroleum Supply M o 1984 Four-Week Averages: Estimates based on Weekly Petroleum Status Report/Energ

# REFINERY ACTIVITY (Million Barrels per Day)

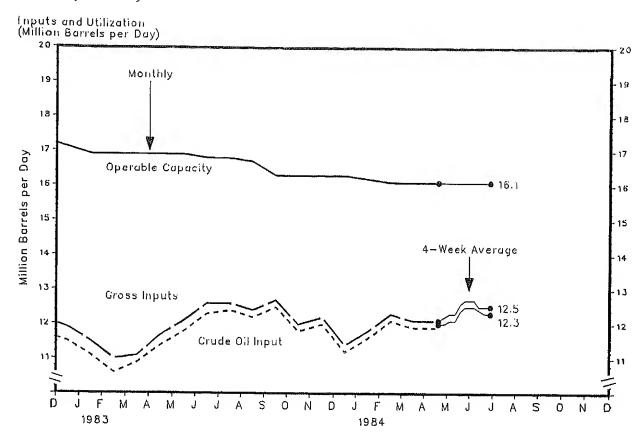
Inputs and Utilization

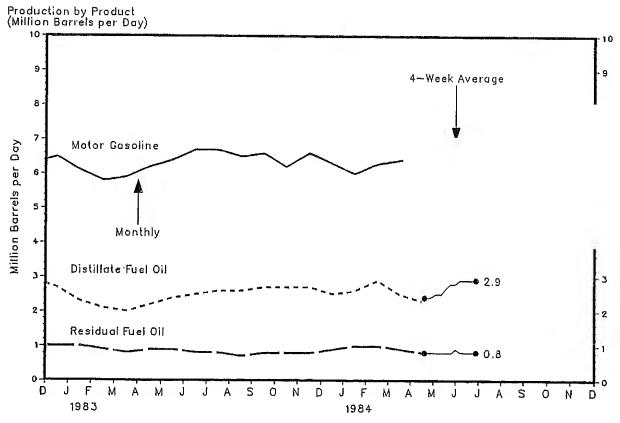
Year/Element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982 Crude Oil Input Cross Inputs Operable Capacity Percentage Utilization <sup>1</sup>	11.6 12.0 17.9 67.0	11.2 11.6 17.8 65.1	11.3 11.7 17.8 65.5	11.4 11.8 17.8 66.2	11.8 12.2 17.8 68.8	12.5 12.9 17.3 74.9	12.4 12.9 17.2 74.9	11.9 12.2 17.2 71.0	12.1 12.6 17.0 73.9	11.7 12.2 17.2 70.6	11.7 12.1 17.2 70.6	11.5 11.9 17.1 69.7
1983 Crude Oil Input Gross Inputs Operable Capacity Percentage Utilization <sup>1</sup>	11.1 11.5 16.9 68.0	10.6 11.0 16.9 65.1	10.9 11.1 16.9 66.0	11.4 11.7 16.9 69.6	11.8 12.1 16.9 71.6	12.3 12.6 16.8 74.9	12.4 12.6 16.8 74.9	12.2 12.4 16.7 73.8	12.5 12.7 16.3 78.1	11.8 12.0 16.3 73.4	12.0 12.2 16.3 74.8	11.2 11.4 16.3 69.9
1984 Crude Oil Input Gross Inputs Operable Capacity Percentage Utilization <sup>1</sup>	11.6 11.8 16.2 72.9	12.1 12.3 16.1 76.1	11.9 12.1 16.1 75.0	11.9 12.1 16.1 .74.8								
Average for Four-Week Period 1984	Ending: 5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Crude Oil Input Gross Inputs Operable Capacity Percentage Utilization <sup>1</sup>	12.0 12.1 E16.1 75.0	12.0 12.2 E16.1 75.3	12.1 12.3 E16.1 76.0	12.1 12.3 E16.1 76.1	12.4 12.6 E16.1 78.1	12.5 12.7 E16.1 78.7	12.5 12.7 E16.1 78.8	12.5 12.7 E16.1 78.8	12.4 12.5 E16.1 77.8	12.3 12.5 E16.1 77.4	12.3 12.5 E16.1 77.3	
Production by Product												
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec
1982 Motor Gasoline Jet Fuel Distillate Fuel Oil Residual Fuel Oil	6.2 0.9 2.6 1.2	5.9 1.0 2.4 1.2	6.0 1.1 2.3 1.1	6.1 1.0 2.4 1.2	6.3 0.9 2.6 1.1	6.8 0.9 2.7 1.1	6.8 1.0 2.7 1.0	6.4 1.0 2.5 1.0	6.5 1.0 2.7 1.0	6.3 1.0 2.8 1.0	6.3 1.0 2.9	6.5 0.9 2.7 1.0
1983 Motor Gasoline Jet Fuel Distillate Fuel Oil Residual Fuel Oil	6.1 1.0 2.3 1.0	5.8 1.0 2.1 0.9	5.9 1.0 2.0 0.8	6.2 1.0 2.2 0.9	6.4 1.0 2.4 0.9	6.7 1.0 2.5 0.8	6.7 1.0 2.6 0.8	6.5 1.0 2.6 0.7	6.6 1.1 2.7 0.8	6.2 1.0 2.7 0.8	6.6 1.1 2.7 0.8	6.3 0.9 2.5 0.9
Fuel Oil	6.0 1.0 2.6 1.0	6.3 1.1 2.9 1.0	6.4 1.1 2.5 0.9	6.5 1.1 2.3 0.8								
- Four-Week Period	Ending: 5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
e el Ofl Ofl	6.7 1.1 2.4 0.8	6.6 1.1 2.4 0.8	6.8 1.1 2.5 0.8	6.7 1.1 2.5 0.8	6.7 1.1 2.7 0.8	6.8 1.1 2.8 0.8	6.8 1.1 2.8 0.9	6.8 1.1 2.9 0.8	6.8 1.1 2.9 0.8	6.7 1.1 2.9 0.8	6.6 1.1 2.9 0.8	

L=Lstimate based on most recent monthly data.

1 Percentage utilization is calculated as four-week average gross inputs divided by the latest reported monthly operable capacity. See Glossary. Percentages are calculated using unrounded numbers. Note: Production statistics represent net production (i.e., refinery output minus refinery input). Source: See Sources Section of this publication.

# Refinery Activity

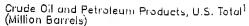


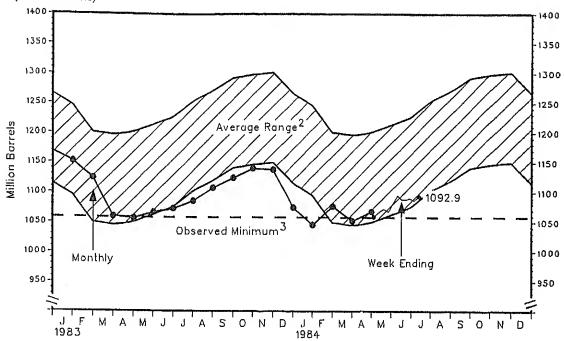


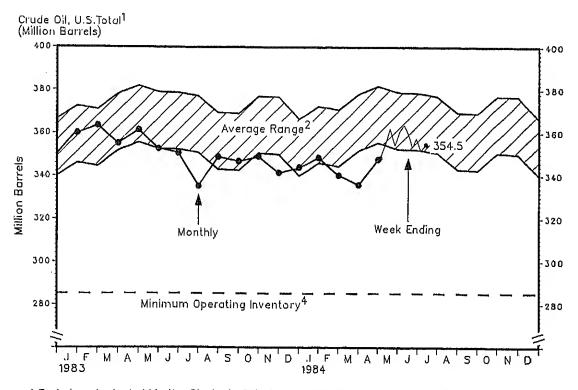
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec
1982 Crude Oil <sup>2</sup> Motor Casoline Finished Casoline Blending Components Jet Fuel Distillate Fuel Oil Residual Fuel Oil Unfinished Oils Other Oils Total (Excl. SPR) Crude Oil in SPR Total (Incl. SPR)	36.9 164.4 68.7 115.9 203.0 1,220.6 235.3	256.6 208.4 48.3 36.9 147.4 58.5 116.5 199.1 1,186.9 241.2	246.5 198.1 48.5 42.5 126.3 58.1 115.9 193.3 1,143.4 248.5	44.1 108.0 53.6 119.1 189.2 1,090.0 255.5	40.8 41.7 113.6 59.0 118.2 190.8 1,085.7 261.0	218.5 177.1 41.4 39.9 123.7 60.7 118.0 191.1 1,096.0	225.9 182.7 43.2 39.8 148.1 58.9 117.8 190.1 1,126.3	226.9 7 185.2 41.8 8 40.7 158.7 9 52.6 8 116.8 1,134.9 273.6	233.6 2 191.1 3 42.5 7 39.6 7 161.2 6 61.8 8 117.8 8 181.3 9 1,136.1	234.4 192.4 42.0 40.9 170.1 63.6 113.3 174.6	357.6 230.0 189.3 40.7 40.6 185.6 66.4 111.8 173.3 1,165.2 290.0 1,455.2	293.8
1983 <sup>4</sup> Crude Oil <sup>2</sup> Motor Gasoline Finished Gasoline Blending Components Jet Fuel Distillate Fuel Oil Residual Fuel Oil Unfinished, Oils Other Oils Total (Excl. SPR) Crude Oil in SPR Total (Incl. SPR)	359.8 249.7 207.2 42.5 40.7 167.6 60.5 110.6 162.9 1,151.9 300.6	363.3 250.2 206.5 43.8 39.4 148.2 53.3 108.7 161.0 1,124.1 306.1	355.0 223.0 182.7 40.4 41.6 118.1 46.3 111.8 163.9 1,059.7 311.8	361.2 220.7 182.8 37.9 40.3 103.1 46.6 114.6 170.6 317.7	352.5 223.1 185.3 37.8 41.1 108.9 51.0 113.1 1766.9 1,066.7	350.5 222.6 182.8 39.7 41.1 113.7 49.9 110.8 184.4 1,073.0	335.1 230.5 189.7 40.8 130.7 51.9 108.0 188.8 1,085.8	348.7 5 226.3 6 184.8 7 41.5 8 40.0 1 142.4 48.3 1 110.5 1 1,107.7	346.7 229.1 189.3 41.4 154.0 49.7 112.9 190.6 1,124.3	348.9 227.4 187.1 40.3 43.2 162.6 51.2 194.9 1,140.3	341.4 235.8 196.0 39.8 45.6 161.2 54.2 109.1 190.9 1,138.3 371.3 1,509.6	343.9 222.4 185.5 36.9 38.6 140.3 48.5 108.0 172.9 1,074.5
1984 Crude Oil <sup>2</sup> Motor Gasoline Finished Gasoline Blending Components Jet Fuel Distillate Fuel Oil Residual Fuel Oil Unfinished Oils Other Oils Total (Excl. SPR) Crude Oil in SPR Total (Incl. SPR)	348.4 225.5 185.5 39.9 35.6 119.5 45.4 1160.5 1,045.6	340.2 237.1 196.6 40.5 39.0 132.2 57.6 160.9 1,076.7 387.2 1,463.9	335.7 243.2 202.8 40.5 40.6 109.6 47.6 115.7 1,052.2 391.8	347.6 248.0 207.4 40.6 40.7 97.8 47.4 120.3 166.2 1,068.0 396.9								
Week Ending: 1984	5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Crude Oil <sup>2</sup> Motor Gasoline Finished Gasoline Blending Components Jet Fuel Distillate Fuel Oil Residual Fuel Oil Unfinished <sub>3</sub> Oils Other Oils Total (Excl. SPR) Crude Oil in SPR	1,058.6	220.2	1,072.1	400.0	4UZ . B	1,095.1	408.4	1,087.5	357.5 249.9 208.0 41.9 41.0 113.3 44.5 105.6 E178.3 1,090.1	351.7 247.9 206.9 41.0 42.1 115.5 44.1 105.1 E179.5 1,086.0 413.7 1,499.7	354.5 246.2 206.5 39.8 41.8 119.2 46.8 103.6 E180.8	

<sup>1.</sup> See Glossary for definition of "Stock Change (Refined Products)" for explanation of other oils odology.
cocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks gas processing plants are included in "Other Oils" and in totals. All stock levels are as of

# Stocks







1 Excludes stocks held in the Strategic Petroleum Reserve and includes crude oil in transit to refineries. See Appendix D for explanation of the 1983 new stock basis.

2 Average level, width of average range, and observed minimum are based on three years of monthly data: January 1981—December 1983. The seasonal pattern is based on seven years of monthly data: January 1976—December 1982. See Appendix B for further explanation.

3 The observed minimum for total stocks in the last three—year period January 1981—December 1983, was 1056.6 million barrels. It occurred in April 1983. See Appendix B for further explanation.

4 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for crude oil to be 285 million barrels. See Appendix B for further explanation.

Source: See Sources Section of this publication.

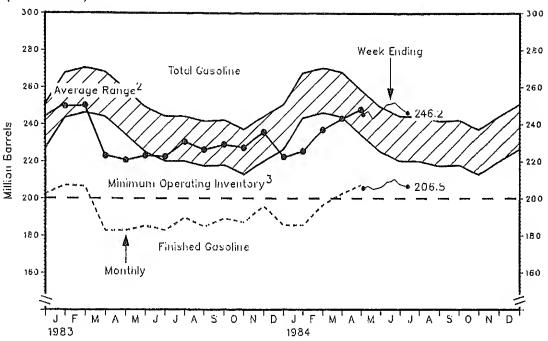
STOCKS OF MOTOR GASOLINE BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT ( $Million\ Barrels$ )

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec
1982 Finished Gasoline Blending Components Total Gasoline East Coast (PADD 1) Midwest (PADD 2) Gulf Coast (PADD 3) Rocky Mountain (PADD 4) West Coast (PADD 5)	213.2 47.6 260.8 71.9 77.7 70.2 9.6 31.4	208.4 48.3 256.6 69.7 78.4 69.3 9.9 29.3	198.1 48.5 246.5 66.8 74.0 68.0 10.1 27.6	178.6 42.7 221.3 61.4 62.7 63.2 9.0 25.0	173.1 40.8 213.9 63.6 56.1 63.5 7.7 23.2	177.1 41.4 218.5 65.5 56.4 64.9 6.5 25.3	225.9	41.8 226.9 62.5 65.8	191.1 42.5 233.6 63.5 69.3 67.5 5.7 27.7	192.4 42.0 234.4 63.5 67.0 69.8 6.5 27.6		194.4 40.9 235.4 67.5 65.3 66.2 8.5 27.9
1983 <sup>1</sup> Finished Gasoline Blending Components Total Gasoline East Coast (PADD 1) Midwest (PADD 2) Gulf Coast (PADD 3) Rocky Mountain (PADD 4) West Coast (PADD 5)	207.2 42.5 249.7 70.2 75.2 63.9 9.4 31.0	206.5 43.8 250.2 66.0 77.4 65.5 9.4 31.9	182.7 40.4 223.0 55.3 68.3 65.4 8.3 25.8	182.8 37.9 220.7 60.8 65.3 62.6 7.9 24.1	185.3 37.8 223.1 63.1 63.7 63.9 7.4 25.0	182.8 39.7 222.6 61.3 63.7 64.2 6.7 26.6	189.8 40.7 230.5 64.4 64.2 65.3 6.4 30.3	184.8 41.5 226.3 62.6 64.4 62.4 5.9 30.8	189.3 39.8 229.1 64.1 65.4 64.8 5.9 28.9	187.1 40.3 227.4 61.7 64.4 67.9 6.3 27.1	196.0 39.8 235.8 63.5 68.4 69.9 7.4 26.6	185.5 36.9 222.4 63.8 63.7 60.1 7.7 27.0
1984 Finished Gasoline Blending Components Total Gasoline East Coast (PADD 1) Midwest (PADD 2) Gulf Coast (PADD 3) Rocky Mountain (PADD 4) West Coast (PADD 5)	185.5 39.9 225.5 61.4 63.2 62.6 8.4 29.9	196.6 40.5 237.1 65.2 68.4 66.2 8.7 28.6	202.8 40.5 243.2 65.2 71.1 71.1 9.0 26.8	207.4 40.6 248.0 66.9 71.4 72.5 8.7 28.5	25,0	20,0		30.0	20.3	2741	20.0	27.0
Week Ending: 1984	5/4	<u>5/</u> 11	5/18	_ 5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Finished Gasoline Blending Components Total Gasoline East Coast (PADD 1) Midwest (PADD 2) Gulf Coast (PADD 3) Rocky Mountain (PADD 4) West Coast (PADD 5)	205.6 39.5 245.2 67.5 68.4 72.8 8.4 28.1	206.8 40.3 247.1 68.1 69.2 72.2 8.6 29.0	204.9 38.1 243.0 67.5 67.1 70.9 8.6 28.9	205.7 39.4 245.1 68.4 67.2 70.6 8.7 30.2	206.8 41.4 248.2 68.7 66.1 73.3 8.7 31.4	209.0 41.8 250.9 70.0 68.2 71.5 8.6 32.6	209.2 41.9 251.2 70.0 63.9 75.7 8.4 33.1	210.5 41.4 252.0 70.8 65.8 74.9 8.1 32.3	208.0 41.9 249.9 69.8 66.3 73.2 7.9 32.8	206.9 41.0 247.9 70.6 66.2 71.1 7.8 32.1	206.5 39.8 246.2 72.7 65.9 69.5 7.3 30.8	

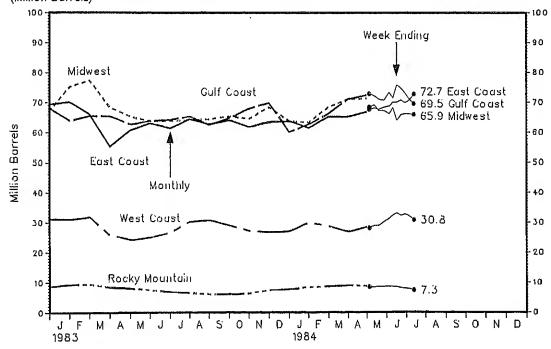
<sup>1</sup> See Appendix D for explanation of the 1983 new stock basis. Note: PAD District data may not add to total due to independent rounding. Source: See Sources Section of this publication.

# Stocks

Motor Gasoline, U.S. Total<sup>1</sup> (Million Barrels)



Motor Gasoline by Petroleum Administration for Defense District<sup>1</sup> (Million Barrels)



1 See Appendix D for explanation of the 1983 new stock basis.
2 Average level, width of average range, and observed minimum are based on three years of monthly data: January 1981—December 1983. The seasonal pattern is based on six years of monthly data. See Appendix B for further explanation.
3 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for total motor gasoline to be 200 million barrels. See Appendix B for further explanation.

Source: See Sources Section of this publication.

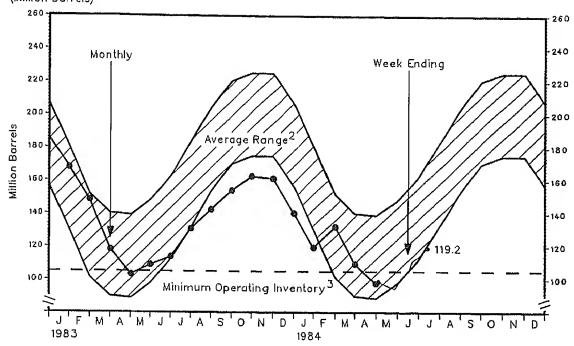
STOCKS OF DISTILLATE FUEL OIL BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT (Million Barrels)

Year/District	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982			*******									
Total U.S.	164,4	147.4	126.3	108.0	113.6	123.7	148.1	158.7	161.2	170.1	185.6	178.6
East Coast(PADD 1)	68.3	60.3	44.7	35.0	39.1	44.2			68.0	75.7	88.7	80.
Midwest(PADD 2)	46.7	43.1	39.5	30.8	30.8	33.7			45.6	44.2	45.3	47.0
Gulf Coast(PADD 3)	31.0	26.8	27.6	28.5	31.1	32.6	34.1	35.6	34.0	37.0	36.9	34
Rocky Mountain(PADD 4) West Coast(PADD 5)	4.1	3.9	3.7	3.1	2.8	3.0	3.4	3.5	3.5	3.5	3.5	4.0
	14.2	13.3	10.8	10.5	9.8	10.2	10.6	10.2	10.1	9.6	11.3	12.7
1983 <sup>1</sup>												
Total U.S.	167.6	148.2	118.1	103.1	100 0	112 7	120 7	160 6	4 111			
East Coast(PADD 1)	71.1	55.5	38.0	31.8	108.9 36.9	113.7	130.7	142.4	154.0	162.6	161.2	140.3
Midwest(PADD 2)	47.1	46.5	39.0	33.2	30.4	41.0 29.6	50.9	61.7	67.5	74.6	70.7	57.7
Gulf Coast(PADO 3)	31.2	28.9	26.7	26.0	28.7	29.7	33.3 32.4	36.3	38.6	40.3	42.8	40.2
Rocky Mountain (PADD 4)	4.1	4.0	3.3	2.8	2.9	2.8	3.0	30.8 3.0	34.4	34.4	33.8	27.8
West Coast(PADD 5)	14.0	13.4	11,1	9.3	9.9	10.6	11.0	10.6	2.7 10.8	2.6 10.7	2.8	3.3
984									10.0	10.7	11.2	11.3
otal U.S.	119.5	120.0	400 -									
East Coast(PADD 1)	43.4	132.2 54.4	109.6	97.8								
Midwest(PADD 2)	37.1	37.0	37.3	29.8								
Gulf Coast(PADD 3)	24.7	26.8	33.5 24.2	30.2								
Rocky Mountain(PADD 4)	3.4	3.2	3.4	23.0 3.3								
West Coast (PADD 5)	10.8	10.8	11.3	11.5								
nation Feat			****	1145								
eek Ending: 984												
704	5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
otal U.S.	98.7	07.1	05.0						0/23	770	//13	
East Coast(PADD 1)	30.4	97.1 28.6	95.7	94.3	99.3	103.0	104.7	111.8	113.3	115.5	119.2	
Midwest(PADD 2)	29.3	30.2	28.8 27.0	29.2	31.4	34.4	36.1	37.3	37.8	39 5	40.4	
Gulf Coast(PADD 3)	24.3	23.8	25.4	26.4	27.4	26.2	27.6	31.6	31.9	32.3	34.1	
Kocky Mountain(PADD 4)	3,1	3.2	3.2	24.1 3.3	25.5	27.2	26.5	27.9	28.6	28.0	29.5	
West Coast(PADD 5)	11.6	11.3	11.4	11.3	3.3 11.6	3.2	3.3	3.2	3.2	3.3	3.5	
			.,,,	1113	11.0	11.9	11.2	11.8	11.8	12.4	11.8	

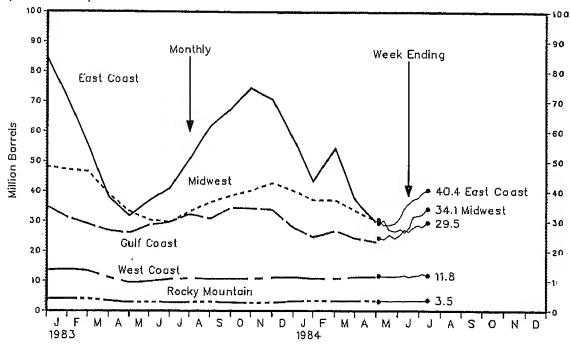
<sup>1</sup> See Appendix D for explanation of the 1983 new stock basis. Note: PAD District data may not add to total due to rounding. Source: See Sources Section of this publication.

Stocks

Distillate Fuel Oil, U.S. Total<sup>1</sup> (Million Barrels)



Distillate Fuel Oil by Petroleum Administration for Defense District  $^{1}$  (Million Barrels)



1 See Appendix D for explanation of the 1983 new stock basis.

2 Average level, width of average range, and observed minimum are based on three years of monthly data: January 1981—December 1983. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation.

3 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level helps which operating problems and shortages would begin to appear in a

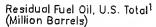
inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for distillate fuel oil to be 105 million barrels. See Appendix B for further explanation.

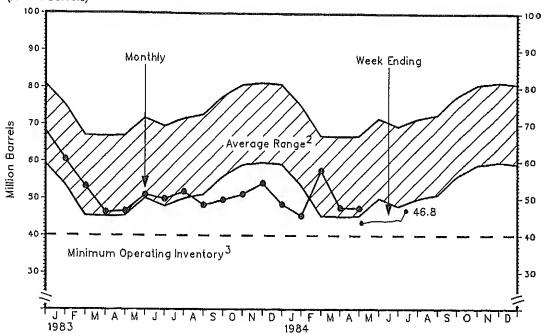
STOCKS OF RESIDUAL FUEL OIL BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT (Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982 Total U.S. East Coast(PADD 1) Midwest(PADD 2) Gulf Coast(PADD 3) Rocky Mountain(PADD 4) West Coast(PADD 5)	68.7 32.2 7.8 17.7 0.6 10.3	58.5 25.0 7.3 14.7 0.7 10.8	58.1 25.0 7.0 14.7 0.6 10.9	53.6 23.4 6.2 13.5 0.5	59.0 28.3 6.0 15.0 0.5 9.2	60.7 28.2 5.6 17.1 0.5 9.3	58.9 27.1 5.7 16.4 0.5 9.3	52.6 23.1 5.2 15.5 0.4 8.4	61.8 29.0 5.7 16.2 0.5	63.6 32.8 5.1 15.6 0.5 9.6	66.4 36.4 5.0 16.1 0.5 8.4	66.2 34.7 5.2 16.3 0.6 9.3
1983 <sup>1</sup> Total U.S. East Coast(PADD 1) Midwest(PADD 2) Gulf Coast(PADD 3) Rocky Mountain(PADD 4) West Coast(PADD 5)	60.5 29.8 5.0 16.2 0.5 8.9	53.3 25.3 4.4 14.0 0.4 9.1	46.3 20.6 3.6 12.8 0.4 8.9	46.6 20.2 3.4 13.4 0.5 9.0	51.0 23.8 3.5 14.5 0.5 8.5	49.9 24.2 3.7 13.1 0.4 8.4	51.9 25.3 3.7 13.7 0.5 8.6	48.3 23.8 3.7 13.2 0.5 7.1	49.7 23.5 3.5 13.8 0.5 8.5	51.2 25.2 3.8 13.5 0.5 8.3	54.2 29.3 3.6 12.3 0.4 8.5	48.5 24.8 4.0 11.0 0.5 8.2
1984 Total U.S. East Coast(PADD 1) Midwest(PADD 2) Gulf Coast(PADD 3) Rocky Mountain(PADD 4) West Coast(PADD 5)	45.4 21.0 3.6 11.8 0.4 8.7	57.6 30.8 4.2 12.9 0.4 9.4	47.6 24.4 4.1 9.9 0.5 8.7	47.4 22.7 3.5 10.9 0.5 9.7								V.2
Week Ending: 1984	5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Total U.S.  East Coast(PADD 1) Midwest(PADD 2) Gulf Coast(PADD 3) Rocky Mountain(PADD 4) West Coast(PADD 5)	43.5 20.5 3.8 10.1 0.6 8.5	43.7 21.6 3.7 9.5 0.6 8.3	44.0 21.7 3.9 9.4 0.6 8.4	44.1 21.4 3.9 9.6 0.6 8.6	44.0 21.8 4.1 9.5 0.6 7.9	43.9 21.9 3.8 9.7 0.6 7.8	43.9 21.3 3.7 10.0 0.6 8.2	44.1 22.7 3.8 8.9 0.6 8.2	44.5 21.2 3.7 10.4 0.6 8.6	44.1 21.1 3.4 10.0 0.7 9.0	46.8 23.5 3.6 9.6 0.6 9.5	***************************************

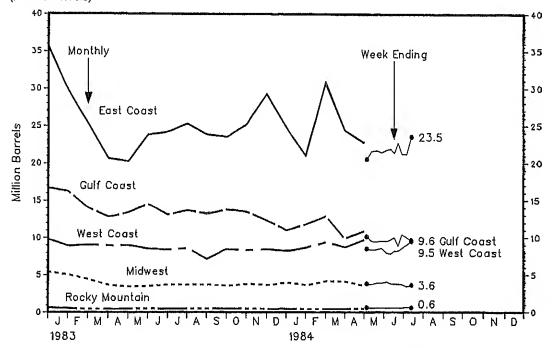
<sup>1</sup> See Appendix D for explanation of the 1983 new stock basis. Note: PAD District data may not add to total due to rounding. Source: See Sources Section of this publication.

Stocks





Residual Fuel Qil by Petroleum Administration for Defense District 1 (Million Barrels)



1 See Appendix D for explanation of the 1983 new stock basis.
2 Average level, width of average range, and observed minimum are based on three years of monthly data: January 1981—December 1983. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation
3 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which council in a problem and chartered would be in to appear in a

inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for residual fuel oil to be 40 million barrels. See Appendix B for further explanation.

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Ju1	Aug	Sep	0ct	Nov	Dec
1982	<del></del>					······································	<del></del>					
Crude Oil (Excl. SPR) SPR	3.5	2.7	2.7	2.7	3.1	3.7	4.2	3.6	3.5	3.5	3.7	2.9
Refined Products	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1
Gross Imports (Incl. SPR)	1.6 5.3	1.8 4.8	1.6 4.5	1.5 4.4	1.5 4.8	1.5	1.6	1.4	1.8	1.6	1.9	1.6
lotal Exports'	0.8	0.8	0.9	0.8	0.8	5.3 0.7	5.9 0.7	5.2 0.9	5.4 0.8	5,3 0.9	5.7	4.6
Net Imports (Incl. SPR)	4.5	4.0	3.6	3.6	4.0	4.6	5.1	4.4	4.6	4.4	0.8 5.0	0.9 3.7
1983 Crude Oil (Excl. SPR)										• • •	0,0	3.,
SPR	2.7 0.2	2.1 0.2	2.1	2.9	3.1	3.4	3.6	3.9	3.9	3.2	3.2	3.0
Refined Products	1.5	1.5	0.2 1.4	0.2 1.6	0.3 1.7	0.2 1.7	0.3 1.9	0.4 1.9	0.3	0.2	0.2	0.2
Gross Imports (Incl. SPR)	4.4	3.7	3.7	4.7	5.1	5.3	5.7	6.2	1.9 6.1	1.8 5.3	1.9 5.2	1.8 5.0
Total Exports	1.0	0.9	0.8	0.8	0.8	0.8	0.6	0.7	0.7	0.6	0.7	0.6
Net Imports (Incl. SPR) 1984	3.5	2.9	2.9	3.9	4.2	4.6	5.2	5.5	5.4	4.7	4.5	4.4
Crude 011 (Excl. SPR)	2.8	2.9	3.3	3.2								
SPR	0.2	0.1	0.1	0.2								
Refined Products	2.3	2.7	1.8	1,9								
Gross Imports (Incl. SPR)	5.3	5.6	5.3	5.3								
Net Imports (Incl. SPR)	0.6 4.8	0.6 5.1	0.8	0.7								
			4.4	4.7								
Average for Four-Week Perio 1984	od Ending 5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Crude Oil (Excl. SPR)	3.3	3.3	3,6	3.5	3.6	3.5	3 5			***		
SPR	0.1	0.2	0.1	0.2	0.2	0.2	3.5 0.3	3.5 0.3	3.4 0.3	3.5 0.3	3.4	
Refined Products	1.6	1.6	1.6	1.6	1.7	1.8	1.7	1.7	1.8	1.7	0.3 1.7	
Gross Imports (Incl. SPR) Total Exports	5.0	5.2	5.4	5.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
Net imports (Incl. SPR)	E0.6 4.4	E0.6 4.6	E0.6 4.7	E0.7 4.5	EO.8 4.8	E0.8 4.7	E0.8 4.7	E0.8 4.7	EO.7 4.8	E0.7 4.8	E0.7 4.8	
(Thousand Barrels per Day)		·										
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Ju1	Aug	Sep	0ct	Nov	Dec
1982							· · · · · · · · · · · · · · · · · · ·					
Finished Motor Gasoline Jet Fuel	128	133	183	185	182	230	225	291	223	185	211	178
Distillate Fuel Oil	10 97	62 132	39 48	47	31	100	31	26	30	20	40	7
Residual Fuel Oil	831	956	912	59 788	74 742	102 652	125 657	80 550	61	91	145	109
Other Petroleum Products <sup>2</sup>	573	533	427	449	474	504	604	445	872 592	783 557	836 650	747 564
1983 Finished Motor Gasoline	450	440								55,	050	204
Jet Fuel	153 27	128 8	186 35	255	305	277	302	250	279	330	269	224
Distillate Fuel Oil	68	59	42	15 73	29 147	26 179	30 267	40 301	44	49	23	24
Residual Fuel 011	691	647	686	753	738	677	684	301 7 <b>3</b> 9	259 706	260 638	203 780	221 649
Other Petroleum Products <sup>2</sup>	535	617	450	512	511	591	586	602	631	5 <b>35</b>	599	703
Finished Motor Gasoline	233	303	343	308								, 00
Jet Fuel	60	112	343 45	308 95								
Distillate Fuel Oil	270	458	115	220								
Residual Fuel Oil Other Petroleum Products <sup>2</sup>	1,061	1,107	633	637								
	695	711	662	642								
Average for Four-Week Period 1984	d Ending: 5/4	5/11	5/10	E /05	C /4	0.40						
		5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13 .	
Finished Motor Gasoline Jet Fuel	285	277	303	293	308	282	261	271	222	234	252	
Distillate Fuel Oil	54 146	55 152	51 135	36 171	44	57	52	46	44	31	34	
Pesidual Fuel Oil	509	511	135 580	171 527	253 597	336 588	367 501	366	326	248	239	
Other Petroleum Products <sup>2</sup>	560	638	566	550	514	497	501 515	585 477	616 554	651 542	686 538	
				-			5.5	717	۳۵۰۲	344	230	

Note: Detail data may not add to total due to independent rounding. Source: See Sources Section of this publication.

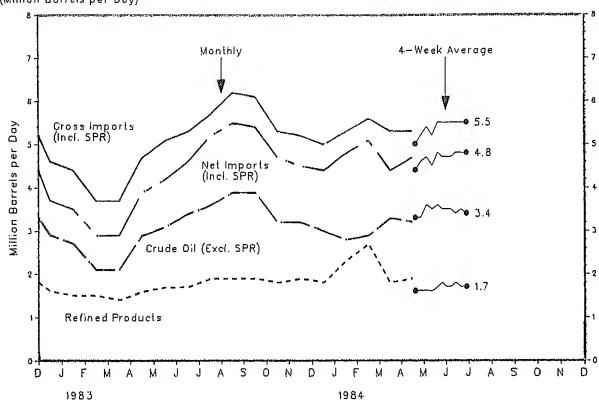
E=Estimate based on most recent monthly data available.

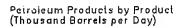
1 Includes exports of crude oil and refined petroleum products. Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

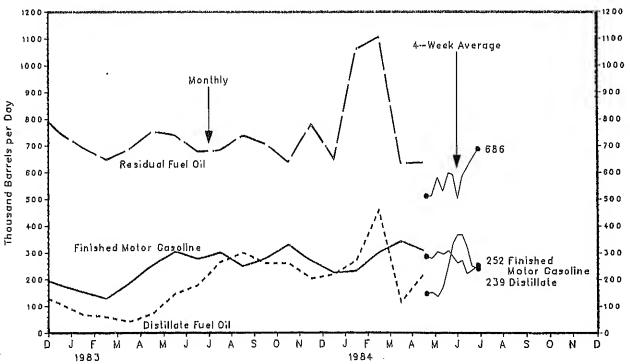
2 Includes imports of kerosene, unfinished oils, motor gasoline blending components, liquefied

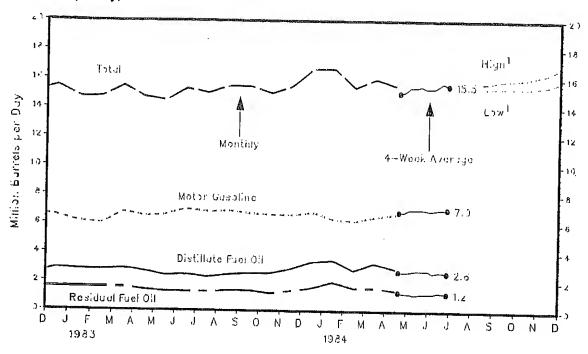
# Imports

Crude Oil and Petroleum Products (Million Barrels per Day)









Year/Product	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982 Motor Gasoline Jet Fuel Distillate Fuel Oil <sup>2</sup> Residual Fuel Oil <sup>2</sup> Other Total	6.0 1.0 3.5 2.2 3.5	6.2 1.1 3.1 2.3 3.3 16.0	6.5 1.0 2.9 1.9 3.3	6.9 1.0 3.0 1.9 3.2 16.0	6.7 1.0 2.4 1.6 3.2 14.8	6.8 1.0 2.5 1.5 3.2	6.8 1.0 2.1 1.6 3.4 14.8	6.6 1.0 2.2 1.5 3.5	6.5 1.0 2.5 1.5 3.5	6.4 1.0 2.6 1.5 3.4 14.9	6.6 1.1 2.5 1.6 3.3 15.0	6.5 1.1 2.9 1.6 3.4 15.5
1983 Motor Gasoline Jet Fuel Distillate Fuel Oil <sup>2</sup> Residual Fuel Oil <sup>2</sup> Other Total	6.1 1.0 2.8 1.6 3.3 14.7	6.0 1.1 2.8 1.6 3.4 14.8	6.8 1.0 2.9 1.6 3.2 15.5	6.5 1.0 2.7 1.4 3.1 14.7	6.6 1.0 2.4 1.3 3.2 14.5	7.0 1.1 2.5 1.3 3.4	6.8 1.1 2.3 1.3 3.6 15.0	6.9 1.1 2.5 1.4 3.6 15.5	6.7 1.1 2.6 1.4 3.8 15.5	6.6 1.0 2.6 1.2 3.5	6.6 1.0 2.9 1.4 3.7	6.8 1.2 3.4 1.6 3.7
1984 Motor Gasoline Jet Fuel Distillate Fuel Oil <sup>2</sup> Residual Fuel Oil <sup>2</sup> Other Total	6.3 1.2 3.5 2.0 3.8 16.7	6.2 1.1 2.8 1.6 3.6 15.4	6.5 1.1 3.3 1.6 3.5 16.0	6.7 1.1 2.9 1.4 3.4	,,,,	12.3	13.0	13.3	15.5	15.0	15.5	16.7
Average for Four-Week Period 1984	Ending: 5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	
Motor Gasoline Jet Fuel Distillate Fuel Oil <sup>2</sup> Residual Fuel Oil <sup>2</sup> Other Total	6.8 1.1 2.7 1.3 3.1 15.0	6.8 1.1 2.7 1.2 3.3 15.1	7.0 1.1 2.7 1.2 3.4 15.4	7.0 1.1 2.8 1.1 3.3 15.4	7.0 1.1 2.8 1.2 3.3 15.5	7.0 1.1 2.8 1.2 3.2 15.3	6.9 1.1 2.8 1.2 3.3 15.3	6.9 1.2 2.6 1.2 3.4 15.3	7.0 1.1 2.7 1.3 3.5 15.5	7.0 1.2 2.7 1.3 3.6 15.7	7.0 1.2 2.6 1.2 3.5 15.5	

<sup>1</sup> Projected. See Appendix C for explanation of derivation of values.
2 Beginning in 1983, crude oil burned as residual fuel oil or distillate fuel oil is no longer reported to the EIA and therefore is not included in product supplied calculations for these fuels. The product supplied series for distillate and residual fuel oil for 1982 shown on this page are the values published in 1982 EIA publications and include crude oil transfers (about 48 thousand barrels per day for residual fuel oil Note: Detail data may not add to total due to independent rounding.

REFINER ACQUISITION COST OF CRUDE OIL (Dollars per Barrel)

Year/Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982					*			<del> v</del>				
Domestic	33.39	32.71	31.08	30.27	30.37	30.79	30.92	30.85	30.76	31.38	31.57	30.80
Imported	35.54	35.48	34.07	32.62	32.78	33.79	33.44	32.95	33.03	33.26	33.09	32.85
Composite	33.95	33.40	31.81	30.83	31.02	31.74	31.74	31.45	31.40	31.98	32.07	31.29
1983												
Domestic	30.55	29.16	28.69	28.45	28.68	28,67	28.74	28.58	10 40	20 00	20 76	10 00
Imported	31.40	30.76	28.43	27.95	28.53	29.23	28.76	29.50	28.69 29.54	28.88 29.67	28.76 29.09	28.62
Composite	30.73	29.49	28.64	28.33	28.64	28.85	28.75	28.88	28.97	29.14	28.85	29.30 28.83
1984												
Domestic	28.62	28.76	28.75	28.63	D20 61							
Imported	28.80	28.91	28.95		P29.26							
Composite	28.67	28.81	28.81		P28.80							

AVERAGE RETAIL SELLING PRICES MOTOR GASOLINE AND RESIDENTIAL HEATING OIL (Cents per Gallon, including Taxes)

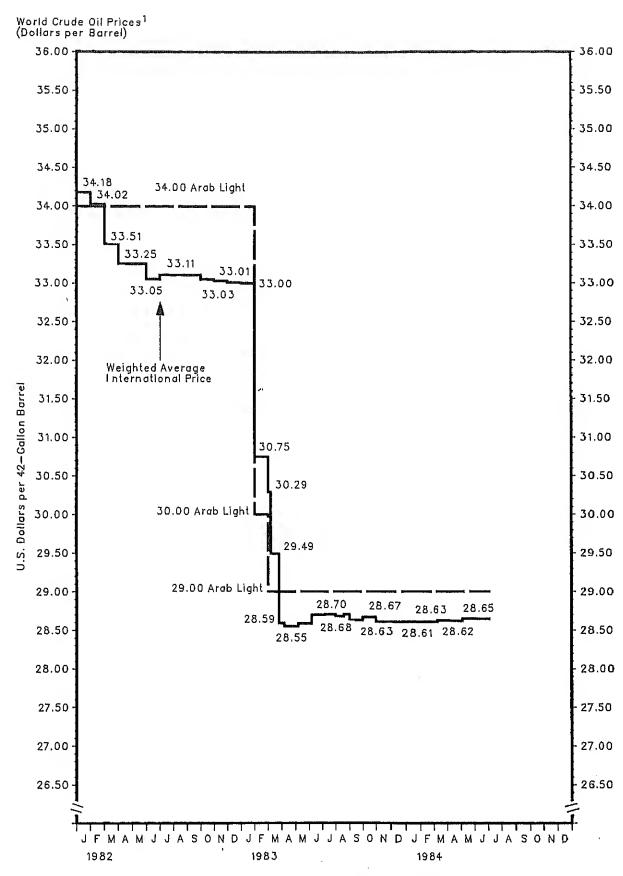
Year/Product	Jan	Feb	Mar	Ap <b>r</b>	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982										· · · · · · · · · · · · · · · · · · ·		
Motor Gasoline												
Leaded Regular	128.5	126.0	120.6	114.8	116,6	124.2	126.3	125.4	123.6	121.9	120.7	118.1
Unleaded Premium	146.6	144.8	140.8	135.1	135.5	141.8	144.3	143.9	142.9	142.1	141.2	139.4
Unleaded Regular	135.8	133.4	128.4	122.5	123.7	130.9	133.1	132.3	130.8	129.5	128.3	126.0
All-Types	134.1	131.8	126.8	121.0	122.4	129.6	131.8	131.0	129.5	128.0	126.8	124.4
Residential Heating Oil	122.0	120.7	115.3	113.2	114.3	116.2	115.8	115.9	115.2	119.6	121.6	119.7
1983												
Motor Gasoline												
Leaded Regular	114.6	109.9	106.4	113.1	117.7	119.7	120.7	120.3	118.9	117.2	115.6	114.6
Unleaded Premium	137.6	133.8	130.8	136.0	139.7	141.1	142.1	141.9	141.0	139.5	138.4	137.6
Unleaded Regular	122.8	118.7	115.1	121.5	125.9	127.7	128.8	128.5	127.4	125.5	124.1	123.1
All-Types 4	121.3	117.0	113.5	119.8	124.3	126.1	127.2	126.9	125.7	123.9	122.4	121.5
Residential Heating Oil'	115.0	111.6	105.1	103.5	104.8	106.0	105.0	104.9	105.7	106.0	106.0	106.7
1984												
Motor Gasoline												
Leaded Regular	113.1	112.5	112.5	114.5	115.4							
Unleaded Premium	136.9	136.1	136.2	137.5	138.0							
Unleaded Regular	121.6	120.9		122.7	123.6							
All-Types .	120.0	119.3	119.4	121.1	122.1							
Residential Heating Oil	112.0	116.9	111.3		• •							

P≖Preliminary 1 Beginning in January 1983, residential heating oil Source: See Sources Section of this publication.

	Type of Crude/							Percent Current P	Change rice From
Country	AP1 Gravity	Current Price	In Effect 1 Jan 83	In Effect 1 Jan 82	In Effect 1 Jan 81	in Effect 1 Jan 80	In Effect 31 Dec 78	in Effect 1 Jan 80	In Effect 31 Dec 78
OPEC									
Saudi Arabia	Arabian Light 34° (Benchmark crude)	29.00	34.00	34.00	32.00	26.00	12.70	11.5	128.3
	Saudi Berri 39°	29.52	34.52	35.40	33.52	27.52	13.23	7.3	123.1
Abu Dhabi	Arabian Heavy 27° Murban 39°	26.00	31.00	31.00	31.00	25.00	12.02	4.0	116.3
Dubai	Fateh 32°	29.56 28.86	34.56	35.50	36.56	29.56	13.26	0	122.9
Qatar	Dukhan 40°	29.49	33.86	33.86	35.93	27.93	12.64	3.3	128.3
Iran	Iranian Light 34°	28.00	34.49 31.20	35.45 34.20	37.42	29.42	13.19	0.2	123.6
Iraq	Kirkuk 36°	29.83	34.83	34.20	37.00	30.004	13.45	-6.7	108.2
Kuwait	Kuwait Blend 31°	27.30	32.30	32.30	37.50 35.50	29.29	13.17	1.8	126.5
Neutral Zone	Khafji 28°	26.03	31.03	31.03	25.20	27.50 27.20	12.22	-0.7	123.4
Algeria	Saharan 44°	30.50	35.50	37.00	40.00	33.00	12.03	-4.3	116.4
Nigeria	Bonny Light 37°	30.00	35.50	36.50	40.00	29.97	14.10 15.12	<del>-</del> 7.6	116.3
Libya	Es Sider 37°	30.15	35.10	36.50	40.78	34.50	13.68	0.1 -12.6	98.4
Indonesia	Minas 34°	29.53	34.53	35.00	35.00	27.50	13.55		120.4
Venezuela	Tia Juana 26°	27.88	32.88	32.88	32.88	25.20	12.72	7.4 10.6	117.9 119.2
Gabon	Mandji 30°	29.00	34.00	34.00	35.00	28.00	12.59	3.6	130.3
Ecuador	Oriente 30°	27.50	32.50	34.25	40.06	33.50	12.35	-17.9	122.7
Total OPEC <sup>3</sup>	NA	28.59	33.54	34.13	34.82	28.30	13.03	1.0	119.4
Non-OPEC									
United Kingdom	Forties 36°	29.90	33.50	36.50	39,25	20 75	14 00	۰.	445 6
Norway	Ekofisk 42°	30.10	34.25	37.25	40.00	29.75 32.50	14.00 14.20	0.5	113.6
Mexico	Mexican Light 33°	29.00	32.50	35.00	38.50	32.00	13.10	-7.4 -9.4	112.0
	Mexican Heavy 22°	25.50	25.50	26.50	34.50	28.00	NA NA	-8.9	121'.4 NA
Egypt	Suez Blend 33°	28.004	31.00	34.00	40.50	34.00	12.81	-17.6	118.6
Oman	Oman 34°	29,00	34.00	35.00	37.50	30.26	13.06	-4.2	122.1
Syria	Suwadiyah 25°	25.00	30.00	30.00	36.03	31.39	11.64	-20.4	114.8
Malaysia	Miri 38°	29.85	35.60	36.50	41.30	33.60	14.30	-11.2	108.7
Brunei U.S.C.D.5	Seria 36°	30.10	35.10	36.10	40.35	33.40	14.15	-9.9	112.7
U.S.S.R. <sup>3</sup>	Export Blend 33°	29.10	31.20	35.49	39.25	33.20	13.20	-12.3	120.5
Total Non-OPEC <sup>3</sup>	NA	28.77	31.72	34.35	38.54	31.94	13.44	-9.9	114.1
Total World <sup>3</sup>	NA	28.65	33.00	34.18	35,49	28.84	13.08	-0.7	119.0
United States <sup>6</sup>	NA	28.43	32.51	34.15	36.69	29.35	13.38	-3.1	112.5

NA=Not Applicable.
1 Official sales prices or estimated term contract prices; spot prices excluded. See Appendix E for further explanation.

<sup>2 37</sup> cents higher at 60 days' credit.
3 Average prices (FOB) weighted by estimated export volume.
4 On 60 days' credit.
5 Average delivered cost to Northwest Europe.
6 Average prices (FOB) weighted by estimated import volume.
Source: See Sources Section of this publication.

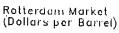


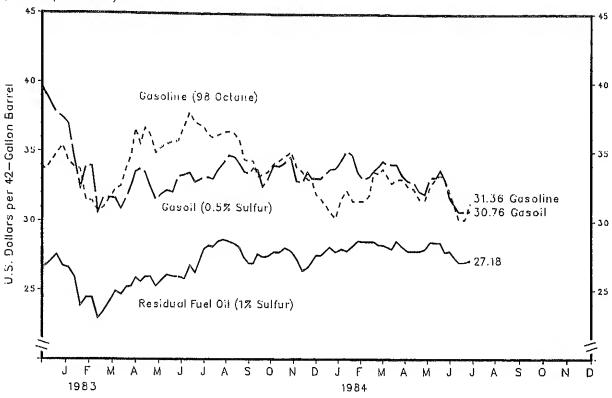
1 Internationally traded oil only. Average price (FOB) weighted by estimated export volume.

	Motor	Gasoline	Gasoil/Hea	ting Oil <sup>1</sup>	Residual	Fuel Oil <sup>2</sup>
	Rotterdam (98 Octane)	N.Y. <sup>3</sup> (89 Octane)	Rotterdam (0.5% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>3</sup> (1% Sulfur)
1983 Jun 24	37.87	37.84	33.51	34.23	26.80	28.50
Jul 1 8	37.16 Not avai	37.42	32.84	34.02	26.28	28.35
15	36.81	36,62	33.18	34.23	28.00	29.00
22	36.28	36.63	33.18	34.23	28.23	28.75
29	36.05	36.52	33.04	34.34 35.18	28.15	28.75
Aug 5 12	36.22	36.64	33.71	35.18	28.53	28.75
19	36.40 36.52	36.52 36.52	34.18 34.79	35.28	28.68	29.00
26	36.34	36.73	34.65	35.28 35.28	28.53 28.38	29.00 29.35
Sep 2	35.87	36.29	34.18	35.07	28.08	29.25
9	34.47	35.99	34.18 33.58	34.65	27.33	28.75
16 23	34.35	35.78	33.44	34.86	26.95	28.75
30	34.41 33.24	35.87	33.85 33.71	35.01	26.95	28.75
Oct 7	33.41	34.92 34.29	32.51	34.02 33.50	27.63 27.40	28.75 28.00
14	33.59	34.82	33.11	34.02	27.48	27.95
21	34.17	34.40	34.05	34.02 33.28	27.78	27.90
28 Nov 4	34.41 34.70	33.94 34.65	33.98	33.18	27.78	28.10
11	35.05	34.25	34.25 34.65	34.65 34.12	28.08 27.85	28.25 28.75
18	33.94	33.54	32.91	33.28	27.03	28.50
25	33,59	33.08	32.91 32.84	33.18	26.43	28.25
Dec 2 9	33.06	32.66	33.58	32.97	26.65	28.20
16	32.94 31.95	31.90 30.91	33.11 33.11	33.08	27.10	28.25
23	31.65	30.98	33.11	32.66 33.70	27.55 27.55	28.50 28.50
30	Not avail	able.	00111	55.70	21.00	20.30
1984 Jan 6 13	30.72	32.57	33.78	35.28	28.15	29.75
20	30.25 31.65	32.34 34.17	33.85 34.38	36.12 <sup>-</sup>	27.78	30.15
27	32.24	33.43	35.12	41.79 44.10	28.00 27.85	30.25 31.25
Feb 3	31.48	34.69	34.79	42.42	28.23	31.50
10 17	31.48	33.64	33.51	38.01	28,60	31,00
24	31.48 31.89	33.85 33.18	33.04	34.23	28.53	30.75
Mar 2	33.59	34.86	33.24 33.71	32.55 33.08	28.53 28.53	30.25
9	33.47	35.01	33.98	32.86	28.30	29.25 29.25
16	33.82	34.69	34.38	32.55	28.30	29.00
23 30	33.29 32.77	34.38	34.12	33.50	28.15	28.75
Apr 6	33.06	35.87 35.26	34.12 34.12	34.76 35.91	28.00	28.75
13	33.06	35.15	33.31	36.02	28.60 28.15	29.25 29.40
20	32.53	34.08	32,91	36.12	27.85	29.40
27 May 4	32.36	33.73	32.84	36.02	27.85	29.40
May 4 11	31.65 31.59	33.96 33.75	32.17	35.80	27.85	29.25
18	32.59	33.85	31.97 33.18	36.12 35.70	28,00 28,53	29.25
25	33.18	33.52	33.18	34.12	28.53 28.45	29.40 29.85
Jun 1	33,35	33.10	33.71	34.23	28.45	30.00
8 15	33.00 32.12	32.68	33.04	33.81	27.78	29.90
22	32.12 31.18	32.05 31.10	31.70 31.23	32.34	27.85	29.75
29	30.13	32.05	30.70	32.13 32.30	27.40 27.03	29.25 28.75
Jul 6	Not availa	able.		02.50	21.03	40.75
13	31.36	32.03	30.76	32.28	27.18	29.00

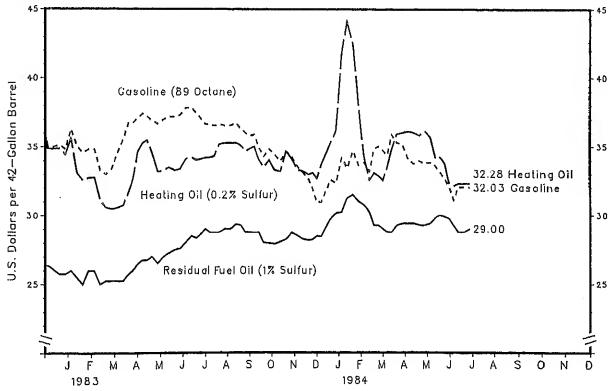
<sup>1</sup> Refers to No. 2 Heating Oil. 2 Refers to No. 6 Oil. 3 East Coast Cargoes. 4 New York Harbor Reseller Barge Prices. Source: See Sources Section of this publication.

# Spot Market Product Prices





# New York Market (Dollars per Barrel)



# WEATHER SUMMARY (Population Weighted Cooling Degree Days 1)

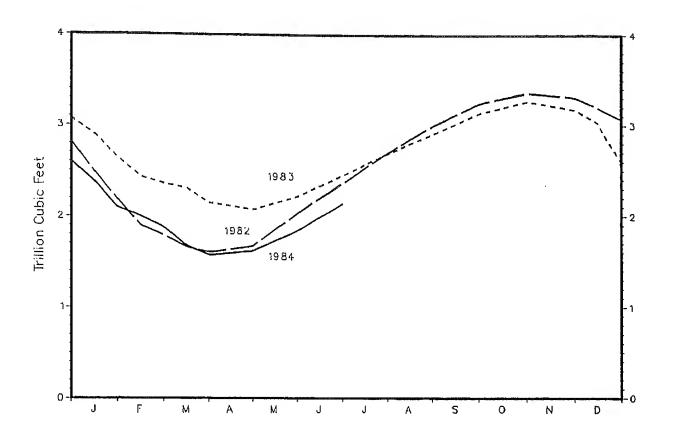
Weather data reported in the Weekly Petroleum Status Report are now taken directly from a computerized system implemented by the National Oceanic and Atmospheric Administration, Department of Commerce.

The neather for the nation, as measured by population-weighted cooling degree-days from January 1, 1984 through July 14, 1984, has been 7 percent warmer than normal and 13 percent warmer than last year.

U.S. TOTAL COOLING DEGREE DAYS (Population Weighted) and by CITY

				Percent	t Change
	1984 This year	1983 Last year	Normal	This year vs. Last year	This year vs. Normal
January 1 - December	31	1,233	1,173	and ma	
January 1 - July 14	516	455	482	13	7
Cities					•
Albuquerque	667	548	P		
Amarillo	572		547	22	22
Asheville	275	431	631	33	-9
Atlanta	746	284	344	-3	~20
Billings		610	741	22	1
Boise	260 178	192	181	35	44
Boston		172	252	3	~29
Buffalo	383	398	254	-4	
Cheyenne	219	266	185	-18	51 10
Chicago	70	64	115	9	18
Cincinnati	299	307	301	-3	-39
Cleveland	446	410	437	9	-1
Columbia, SC	253	306	239	-17	2
Denver	871	754	939	16	<u>6</u>
Des Moines	278	182	262	53	<del>-</del> 7
Petroit	451	4 <b>7</b> 7	445		6
argo	302	263	250	-5 15	1
fartford	187	247	197	15	21
louston	289	318	269	-24	<b>-</b> 5
acksonville	1,178	1,028	1,268	-9	7
ansas City	1,031	866	1,127	15	<b>-</b> 7
as Vegas	499	426	584	19	-9
os Angeles	1,519	1,166	1,303	17	-15
emphis	212	151	189	30	17
iami	954	778	947	40	12
Ilwaukee	1,781	1,758		23	1
inneapolis	263	251	1,966	1	- <u>9</u>
ontgomery	279	304	183	5	44
W York	966	746	292 1,038	-8	-4
Clahoma City	436	412		29	<b>-</b> 7
iaha	841	571	396	6	10
iladelphia	407	401	805	47	4
centx	427	427	528	1	-23
ttsburgh	2,147	1,792	425	ò	-23 0
rtland, ME	232	219	1,638	20	-
ovidence	156	134	257	6	31 -10
leigh	274	330	72	***	-10
chmond	598	524	199	-17	****
· Louis	683	636	608	14	38
lem, OR	7 <b>2</b> 6	582	557	7	-2
It Lake City	17		656	25	23
Francisco	397	34	69	****	11
ittle	87	300	353	32	****
eveport	10	59	17	32 ****	12
hington no	1,047	30	51	***	****
hington, DC	637	823	1,119		****
1 See Closes less th		595	596	27	-6

<sup>\*\*\*\* =</sup> Normal less than 100 or ratio incalculable.



		Working Gas <sup>1</sup>				
	1982	1983	1984			
January 15 January 31 February 15 February 28 March 15 March 31 April 30 May 31 June 30 July 31 August 31 September 30	2.492 2.182 1.900 1.787 1.661 1.604 1.676 2.034 2.369 2.704 2.998 3.251	2.902 2.644 2.433 2.356 2.305 2.148 2.074 2.222 2.454 2.695 2.908 3.141	2.381 2.089 1.997 1.877 1.671 1.572 1.620 1.842 P2.142			
October 31 November 30 December 15 December 31	3.364 3.309 3.197 3.071	3.269 3.174 3.028 2.596				

P=Preliminary 1 Working Gas: Gas available for withdrawal. Source: See Sources Section of this publication.

# Weekly Estimates (Thousand Barrels per Day Except Where Noted)

Crude Oil Production	06/15/84	06/22/84	06/29/84	07/06/84	07/13/84
Domestic Production	E8,743.0	E8,743.0	E8,743.0	E8,769.0	E8,769.0
Inputs and Utilizations					
Crude Oil Input Gross Inputs Operable Capacity (Million Barrels per Day), Percent Utilization	12,338.0 12,467.0 16.1 77.4	12,601.0 12,748.0 16.1 79.1	12,270.0 12,398.0 16.1 76.9	12,135.0 12,251.0 16.1 76.0	12,266.0 12,416.0 16.1 77.1
Production by Product					
Motor Gasoline  Jet Fuel  Naphtha-Type.  Kerosene-Type.  Distillate Fuel Oil.  Residual Fuel Oil.	6,891.0 1,116.0 214.0 902.0 2,846.0 879.0	6,766.0 1,129.0 275.0 855.0 3,057.0 850.0	6,638.0 1,124.0 181.0 943.0 2,805.0 816.0	6,570.0 1,172.0 213.0 959.0 2,908.0	6,549.0 1,160.0 239.0 920.0 2,837.0 753.0
Imports					
Crude Oil SPR Total incl SPR Motor Gasoline Jet Fuel Naphtha-Type Kerosene-Type Distillate Residual Other Total Refined Products Imports.	3,895.0 453.0 4,348.0 132.0 0.0 0.0 0.0 326.0 398.0 495.0 1,351.0	2,860.0 52.0 2,912.0 356.0 21.0 0.0 21.0 295.0 795.0 405.0 1,872.0	3,746.0 554.0 4,300.0 261.0 55.0 6.0 49.0 298.0 774.0 666.0 2,054.0	3,557.0 160.0 3,717.0 186.0 46.0 25.0 21.0 71.0 637.0 600.0	3,623.0 402.0 4,025.0 204.0 11.0 0.0 11.0 291.0 536.0 482.0 1,523.0
Total	E841.0 E236.0 F.605.0	E655.0 E172.0 E483.0	E655.0 E172.0 E483.0	E655.0 E172.0 E483.0	E655.0 E172.0 E483.0
Motor Gasoline Total Jet Fuel Naphtha Jet Fuel Kerosene Jet Fuel. Distillate Fuel 0il Residual Fuel 0il. Other 0ils. Total Products Supplied.	6,984.0 1,151.0 248.0 903.0 2,863.0 1,072.0 3,757.0	6,936.0 1,288.0 230.0 1,058.0 2,306.0 1,487.0 3,423.0 15,440.0	7,259.0 1,145.0 206.0 939.0 2,854.0 1,404.0 3,724.0 16,387.0	6,924.0 1,052.0 242.0 810.0 2,625.0 1,272.0 3,380.0 15,252.0	6,809.0 1,210.0 238.0 972.0 2,574.0 781.0 3,645.0 15,019.0

E=Estimate based on monthly data. Source: See Sources Section of this publication.

#### Appendix A

#### EIA WEEKLY DATA: SURVEY DESIGN AND ESTIMATION METHODS

The Weekly Petroleum Reporting System (WPRS) comprises six surveys: the "Weekly Refinery Report" (EIA-800); the "Weekly Bulk Terminal Report" (EIA-801); the "Weekly Product Pipeline Report" (EIA-802); the "Weekly Crude Oil Stocks Report" (EIA-803); the "Weekly Imports Report" (EIA-804); and the "Weekly Shipments from Puerto Rico to the United States Report" (EIA-805). The EIA weekly reporting system, as part of the Petroleum Supply Reporting System, was designed to collect data similar to those collected monthly. In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804 and EIA-805, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly. All sampled companies report data only for facilities in the 50 States and the District of Columbia. The EIA-800 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline. The EIA-801 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-802 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate, and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-803 sample frame consists of all companies which carry or store crude oil of 1,000 barrels or more. Included are gathering and trunk pipeline companies (including interstate, intrastate and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water. The EIA-804 sample frame includes all importers of record of crude oil and petroleum products into the United States. The EIA-805 sample frame includes all shippers of petroleum products into the United States from Puerto Rico.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published. The EIA-805 is a census of all importers of petroleum products from Puerto Rico.

	Refiners (Refineries)	Bulk Terminals	Product Pipelines	Crude Oil Stock Holders	Importers	Shippers From PR
Weekly Form Monthly Frame Size	EIA-800 152(274)	EIA-801 319	EIA-802 89	EIA-803 180	EIA-804 1208	E1A-805
Weekly Sample Size	60(160)	82	47	87	59	3

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms must file by 5:00 p.m. on the Monday following the close of the report week, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

# Estimation and Imputation

After the company reports have been checked and entered into the model of the base available for companies which have not yet responded. The imputed v reported values for this specific company. The imputed v procedure, which calculates ratio estimates of the weekl product reported by companies in a geographic region are recent month's data for the product reported by those sa Finally, let M be the sum of most recent month's data f current week's ratio estimate for that product for all c

$$W_{t} = \frac{M_{t}}{M_{s}} \cdot W$$

This procedure is used directly to estimate total weekly of finished products, the preceding procedure is followe pipelines. Total estimates are formed by summing over e considered imports for estimation purposes.

Weekly imports data are highly variable on a company-by-exponentially smoothed ratio has been developed. The es smoothed ratio and the sum of the weekly reported values adjustment from Census data for unlicensed products beca data and Census data.

Weekly Petroleum Status Report/En

#### Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-800; 75 percent for the EIA-801; 95 percent for the EIA-802; 80 percent for the EIA-803; greater than 95 percent for the EIA-804 and 100 percent for the EIA-805. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

#### Appendix B

#### INTERPRETATION AND DERIVATION OF AVERAGE INVENTORY LEVELS

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgements of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

#### Average Inventory Levels

The charts displaying inventory levels of crude oil and petroleum products (p.7), crude oil (p.7), motor gasoline (p.9), distillate fuel oil (p.11), and residual fuel oil (p.13) provide the reader with actual inventory data compared to an "average range" from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for total petroleum (crude and products), crude oil, distillate fuel oil, and residual fuel oil were derived using monthly data from 1976-1982. In 1977, monthly stock levels of motor gasoline stayed at the same high level for the entire year. Since there was virtually no seasonal behavior in motor gasoline stocks that year, 1977 was not used in the determination of seasonal patterns for motor gasoline stocks.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the "average range" is twice the standard deviation. The values of the upper and lower curves are presented in the table below.

# Values of Average Ranges in Inventory Graphs (Millions of Barrels)

				(mili	TIONS OF	parreis,	,					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec
Lower Range												
Total Petroleum Crude Oil Motor Gasoline Distillate Fuel Oil Residual Fuel Oil	1094.9 346.0 243.6 130.6 53.7	1049.4 344.4 246.4 101.4 45.4	1045.0 351.7 244.0 89.8 45.2	1050.3 355.5 234.6 88.6 45.4	1062.9 352.4 225.1 97.7 50.1	1076.1 352.2 220.1 112.2 48.0	1103.2 350.6 220.1 133.2 50.1	1120.0 342.9 217.4 153.8 51.2	1141.6 342.4 218.2 170.1 56.1	1147.9 350.5 213.0 175.1 59.2	1150.8 349.8 220.1 174.8 59.9	1114.8 340.0 226.7 156.9 59.3
					Upper Ra	inge						
Total Petroleum Crude Oil Motor Casoline Distillate Fuel Oil Residual Fuel Oil	1246.2 372.5 267.8 181.0 75.3	1200.7 370.9 270.7 151.8 67.0	1196.3 378.2 268.2 140.2 66.8	1201.6 381.9 258.8 139.0 67.0	1214.2 378.8 249.4 148.1 71.7	1227.4 378.7 244.4 162.6 69.6	1254.5 377.1 244.4 183.6 71.7	1271.3 369.3 241.6 204.2 72.8	1292.9 368.9 242.4 220.5 77.7	1299.2 377.0 237.2 225.5 80.8	1302.1 376.3 244.4 225.2 81.5	1266.1 366.4 251.0 207.3 80.9

### Minimum Operating Inventories

d "Minimum Operating Inventory" (MOI) on the stocks graphs for crude oil, motor gasoline, oil, and residual fuel oil represent estimates of those inventory levels made by the National l (NPC) and published in November 1983 in "Petroleum Inventories and Storage Capacity -- An The NPC defines the MOI as the inventory level below which operating problems and shortages appear in a defined distribution system. The NPC report presents the findings of a study which the NPC's Committee on Petroleum Inventories and Storage Capacity. MOI estimates presented in

the report were developed by consensus through a decision-making process that relied on the judgement of Committee members based on their operating experience, on historical inventory trends, and on the results of a NPC survey of companies that provide primary inventory data to the Energy Information Administration.

The estimated values are: Crude oil -- 285 million barrels; motor gasoline -- 200 million barrels; distillate fuel oil -- 40 million barrels.

The NPC did not develop a minimum operating inventory level for total petroleum stocks. The line labeled "observed minimum" on the "Stocks of Crude Oil and Petroleum Products, U.S. Total" graph is the lowest inventory level observed during the same 3-year base period that was used in the derivation of the average inventory levels shown on the graph.

#### Appendix C

# PROJECTION FROM THE SHORT-TERM ENERGY OUTLOOK, MAY 1984

The projections of "high" and "low" total petroleum demand shown in the WPSR as total product supplied, are from the Office of Energy Markets and End Use, Short-Term Energy Outlook (Outlook), May 1984. The three forecast cases presented in the Outlook for 1984 through mid-1985 are based on different assumptions about the growth of the U.S. economy and the associated price of imported crude oil to U.S. refiners. In the high economic growth case, it is assumed that the price of imported crude oil falls to \$27.62 the second quarter of 1984, and then falls to \$25.00 per barrel in the third quarter, staying at this level through the second quarter of 1985. In the base case, it is assumed the average cost for imported crude to U.S. refiners remains at \$29.00 per barrel through the entire forecast period. In the low economic growth case, it is assumed that imported crude oil prices rise at about twice the U.S. rate of inflation through the forecast period.

The plots of the "low" and "high" demand cases shown in the figure are the result of adding upper and subtracting lower range sensitivity differentials to the projected low and high price petroleum demand projections. These differentials are in turn comprised of an economic sensitivity differential, representing an incremental change in petroleum demand due to a high or low rate of economic activity, and a weather sensitivity differential, representing an incremental change in demand due to either adverse or favorable weather conditions that may occur during the forecast period. The upper range differential is developed by taking the square root of the sum of the squares of the amount of increased petroleum demand that would result from adverse weather and the increase due to a high rate of economic activity. The lower range differential is developed by taking the square root of the sum of squares of the projected decreased demand due to favorable weather, and the projected decrease due to a low rate of economic activity.

These combined upper and lower range sensitivity differentials are then added to the low and subtracted from the high price petroleum demand forecasts, respectively, to form projected high and low petroleum demand levels that take account of possible variation in price, economic activity, and weather during the forecast period.

For more detailed information on the above (and other components of the forecast), please refer to the published report, Short-Term Energy Outlook, May 1984, especially Table 14.

Copies of the report are available from:

National Energy Information Center Room 1F-048, Forrestal Building 1000 Independence Avenue, S.W. Washington, D.C. 20585 Telephone 202-252-8800

#### Appendix D

#### CHANGES IN WEEKLY PETROLEUM STATUS REPORT SERIES

Some Weekly Petroleum Status Report (WPSR) data series presented for 1983 and 1984 are different from 1982 WPSR data series. The differences, which are discussed below, are the result of a change in estimation methodology and changes in the reporting frame.

#### Change in Methodology

Beginning in 1983, reports of crude oil used as fuel on leases are treated as reports of crude oil product supplied, a new product supplied category. Before 1983, crude oil used in this fashion was reported as a use of distillate fuel oil or residual fuel oil and was included in the respective product supplied calculations. The monthly series for 1982 shown on p. 16 are the quantities originally calculated and published including crude oil used as fuel. In 1982, the quantities of crude oil used directly in the distillate fuel oil product supplied and residual fuel oil product supplied calculations averaged 10 thousand barrels per day and 48 thousand barrels per day, respectively.

### Change in Stock Basis

The list of operators of bulk terminals, pipelines, and crude stock holders required to report each month their crude oil and petroleum product stocks was updated in a regular review of the petroleum supply reporting frame during 1982. (See the article in Petroleum Supply Monthly, March 1983 for details.) This expansion was first incorporated in monthly data published for January 1983. The new list of operators was also used to select new samples for EIA Forms 801 (bulk terminals), 802 (pipelines), and 803 (crude stock holders) of the weekly petroleum reporting system. The new weekly sample was used for estimation beginning with the week ending April 1, 1983. The table below shows the new-basis stock levels for December 31, 1982 which can be compared with the old frame stock levels shown on the respective pages of the WPSR. The new-basis stocks of crude oil and petroleum products, including the Strategic Petroleum Reserve, are 2.2 percent greater than the old basis stocks.

#### New Basis Stock Levels for Crude Oil and Petroleum Products December 31, 1982

	Percent Increase	U.S. Total	PADD 1	PADD 2	PADD 3 housand Barre	PADD 4	PADD 5
Crude Oil Total Motor Gasoline Finished Gasoline Blending Components Naphtha-type Jet Fuel Kerosene-type Jet Fuel Distillate Fuel Oil Residual Fuel Oils Unfinished Oils Other Oils Total Oils	0.2 <sup>1</sup> 3.4 3.9 1.4 18.1 2.5 3.9 3.5 0.0 6.4 2.2	644,993 243,542 202,032 41,510 6,695 31,948 185,527 68,532 105,269 174,453 1,460,959	17,550 69,376 64,095 5,281 792 9,570 84,721 35,961 13,656 22,033 253,659	78,535 66,959 57,715 9,244 1,525 7,308 48,243 5,377 17,777 49,422 275,146	455,286 68,040 51,165 16,875 2,250 9,004 34,917 16,701 46,209 89,194 721,601	13,512 8,567 6,094 2,473 349 638 4,051 634 2,686 3,766 34,203	80,110 30,600 22,963 7,637 1,779 5,428 13,595 9,859 24,941 10,038 176,350

<sup>1</sup> Calculated including stocks of crude oil in Strategic Petroleum Reserve (293,827 thousand barrels on December 31, 1982).

#### Appendix E

# CALCULATION OF WORLD OIL PRICES

The weighted average international price of oil, shown in the "Highlights" on page 1 and on page 18, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 18, a list of major oil producing/exporting countries was chosen. For each country, the official selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Cuide", "Platt's Oilgram Price Report", "Petroleum Intelligence Weekly", and "Europe Oil Prices") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative official crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

#### **GLOSSARY**

- o Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons.
- o Cooling Degree-Days. The number of degrees per day the daily average temperature is above 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.
- Crude Oil. A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate and drips are included but topped crude oil (residual) and other unfinished oils are excluded.
- o Crude Oil input. The total crude oil put into processing units at refineries.
- o Degree-Day Normals. Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1951-1980). These may be simple degree-day normals or population-weighted degree-day normals.
- o Distillate Fuel Oils. Includes No. 1, No. 2, and No. 4 fuel oils, and No. 1, No. 2, and No. 4 diesel fuels. These are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.
- o Gross Inputs. The crude oil, unfinished oils, and natural gas plant liquids put into distillation units.
- o Heating Degree-Days. The number of degrees per day the daily average temperature is helow 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.
- o Imports. Unless otherwise specified in this report, refers to gross imports. Imports of minor products ("other oils") include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, gasoline blending components, and other miscellaneous oils.
- o Jet Fuel. Includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a fuel in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.
- o Motor Gasoline. Finished leaded gasoline, finished unleaded gasoline, and blending components in the gasoline range. Production and imports data represent finished leaded gasoline and finished unleaded gasoline. Stocks data consist of the two types of finished gasoline and blending components. Stock change used in the calculation of motor gasoline product supplied is the change in finished motor gasoline stocks. Imports of motor gasoline blending components are contained in other oils imports.
- Operable Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.
- Petroleum Administration for Defense Districts (PADD). Five geographical areas into which the nation was divided by the Petroleum Administration for Defense for purposes of administration. These PADDs include the states listed below:
  - PADD 1: Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.
  - PADD 2: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.
  - PADD 3: Alabama, Arkansas, Louisiana, Mississippi, New Mexico and Texas.
  - PADD 4: Colorado, Idaho, Montana, Utah, and Wyoming.
  - PADD 5: Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington.
- Population-Weighted Degree-Days. Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree days, each State is divided into from one to nine climatically homogeneous divisions which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and these products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions comprised of from three to eight States which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and these products are then summed to arrive at the national population weighted degree-day figure.

- Product Supplied. A value calculated for specific products which is equal to domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total products supplied is calculated as inputs to refineries, plus estimated refinery gains, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks. Values shown for "Other Oils" product supplied are the difference between total product supplied and product supplied values for specified products. Other oils product supplied incorporates crude oil product supplied and reclassified product adjustment.
- Refiner Acquisition Cost of Crude Oil. The average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1131. Imported crude oil is any crude oil which is not domestic oil. The composite is the weighted average price of domestic and imported crude oil. Prices do not include the price of crude oil for the SPR.
- Refinery Capacity Utilization. Ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1982 the refinery capacity utilization for all U.S. refineries ranged between 87 percent and 65 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the types of products produced, and the operating conditions of the refinery.
- Residual Fuel Oils. Includes No. 5 and No. 6 fuel oils which are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses.
- Retail Motor Gasoline Prices. Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).
- Stock Change (Refined Products). Component of Product Supplied calculation shown on U.S. Petroleum Balance. The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way; an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historial monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past six years; 2) using this daily rate and the minor stock levels from the most recent monthly publication to estimate the minor product stock level for the current period.
- Stocks. For individual products in the WPSR, quantities held at refineries, in pipelines, and at bulk terminals which have a capacity of 50 thousand barrels or more, and in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but included in "Other Oils" estimates and "Total."
- Unaccounted-for Crude Oil. A term which appears in U.S. Petroleum Balance Sheet. It reconciles the difference between data (or estimates) about supply and data (or estimates) about disposition. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using final data. In fact, the published figures confirm this expectation. In the WPSR, four-week averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous year is considerably smaller than that for the current period.
- United States. For the purpose of the report, the 50 states and the District of Columbia. Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. Totals.

#### SOURCES

```
Page 4
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly." o Four-Week Averages: Estimates based on EIA weekly data.
          o 1983, EIA, "Petroleum Supply Annual".
o Monthly Data: 1984, EIA, "Petroleum Supply Monthly."
o Four-Week Averages: Estimates based on EIA weekly data.
Page 6
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly." o Week-Ending Stocks: Estimates based on EIA weekly data.
Page 7

    Data for Ranges and Seasonal Patterns: 1977-1980, EIA, "Petroleum Statement Annual (Final Summary)," 1981-1982, EIA, "Petroleum Supply Annual," 1983, EIA, "Petroleum Supply Monthly."
    Monthly Data: 1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly."
    Week-Ending Stocks: Estimates based on EIA weekly data.

Page 8
           o Monthly Data: 1982-1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly."
           o Week-Ending Stocks: Estimates based on EIA weekly data.
Page 9
          o Data for Ranges and Seasonal Patterns 1978-1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981-1982, EIA, "Petroleum Supply Annual," 1983, EIA, "Petroleum Supply Monthly." o Monthly Data: 1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly." o Week-Ending Stocks: Estimates based on EIA weekly data.
Page 10
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly." o Four-Week Averages: Estimates based on EIA weekly data.
Page 11
          o Ranges and Seasonal Patterns 1977-1980, EIA, "Petroleum Statement Annual (Final Summary)," 1981-1982, EIA, "Petroleum Supply Annual," 1983, EIA, "Petroleum Supply Monthly." o Monthly Data: 1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly." o Week-Ending Stocks: Estimates based on EIA weekly data.
Page 12
           o Monthly Data: 1982-1983, EIA, "Petroleum Supply Annual," 1984, EIA, "Petroleum Supply Monthly."
           o Four-Week Averages: Estimates based on EIA weekly data.
          o Ranges and Seasonal Patterns 1977-1980, EIA, "Petroleum Statement Annual (Final "Petroleum Supply Annual," 1983, EIA, "Petroleum Supply Monthly o Monthly Data: 1983, EIA, "Petroleum Supply Annual," 1984, EIA, o Week-Ending Stocks: Estimates based on EIA weekly data.
Page 14
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply o Four-Week Averages: Estimates based on EIA weekl
Page 15
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply & o 1984, EIA, "Petroleum Supply Monthly". o Four-Week Averages: Estimates based on EIA weekly
Page 16
          o Monthly Data: 1982-1983, EIA, "Petroleum Supply o Four-Week Averages: Estimates based on EIA weekl
```

o Projections: EIA, Office of Energy Markets and E

```
Page 17
```

- c Refiner Acquisition Cost of Crude Oil: Form EIA-14, "Refiners Monthly Cost Report."
  o Motor Gasoline Bureau of Labor Statistics. See glossary description for "Retail Motor Gasoline Prices."
- o Residential Heating Oil--1982: Form EIA-9A, "No. 2 Distillate Price Monitoring Report," 1983-1984: Forms EIA-782A, "Monthly Petroleum Product Sales Report," and EIA-782B, "Monthly No. 2 Distillate Sales Report."

#### Page 18

- o DOE, Office of International Affairs, July 17, 1984. o Platt's Oilgram Price Report. o Petroleum Intelligence Weekly. o Oil Buyers' Guide. o Europe Oil Prices.

#### Page 20

- o DOE, Office of International Affairs.
  o Oil Buyers' Guide, Weekly Oil Market Product Report. Not published weeks of July 4 and December 25.

#### Page 21

- o DOE, Office of International Affairs o Oil Buyers' Guide, Weekly Oil Market Product Report. Not published weeks of July 4 and December 25.

#### Page 23

o FPC-8/EIA-191, "Underground Gas Storage Report."

o Monthly Data: 1984, EIA, "Petroleum Supply Monthly."

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